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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,229	09/16/2003	Chester Malkowski JR.	03AB105/YOD ALBR:0125	2115
7590	09/07/2005	Alexander M. Gerasimow Allen-Bradley Company, LLC 1201 South Second Street Milwaukee, WI 53204-2496	EXAMINER MCLOUD, RENATA D	
			ART UNIT 2837	PAPER NUMBER

DATE MAILED: 09/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/663,229	MALKOWSKI ET AL.	
	Examiner Renata McCloud	Art Unit 2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 08 August 2005.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,3,5-10,13,15-21,23,26,28 and 30-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,3,5-10,13,15-21,23,26,28 and 30-37 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 16 September 2003 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

**DETAILED ACTION**

***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "bypass relay", "bypass relay having a relay coil and a third set of contacts", "relay coil", "third set of contacts", "a fourth contact electrically coupled in series with the relay coil", "fourth contact", "bypass relay coil", and "control relay" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: bypass relay, third set of contacts, relay coil, a fourth contact, relay, bypass relay coil, control relay.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1, 3,5-10,13,15-21,23,26,28,30-37 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

**Claim 1:** The limitation "bypass relay having a relay coil and a third set of contacts" are not described in the specification. Also the specification does not describe a bypass switch comprising a bypass relay, an operator, and first and seconds sets of contacts.

**Claim 5:** The limitation "relay coil" is not described in the specification. Also, a fourth contact electrically coupled in series with the relay coil" is not described in the specification.

**Claim 6:** the limitation "a fourth contact to de-energize the bypass relay" are not described in the specification.

**Claim 31:** the "bypass relay having a coil and a set of bypass contacts" and the "coil" are not described in the specification

**Claim 32:** a "bypass relay coil" is not described in the specification

**Claim 35:** the limitation "bypass relay coil" is not described in the specification.

**Claim 36:** the limitations "bypass relay coil" and "coil of the control relay" are not described in the specification.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1,3,5-9, 31,34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

**Claim 1:** a bypass switch comprising a bypass relay, an operator, and first and seconds sets of contacts is unclear

**Claim 6** recites the limitation "the manual bypass switch". There is insufficient antecedent basis for this limitation in the claim.

**Claim 19:** the limitation "remotely" is indefinite. The frequency output is established remotely to what?

**Claim 34:** the limitation "can" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention.

**Claim 31** recites the limitation "the external power source". There is insufficient antecedent basis for this limitation in the claim.

#### ***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1,3,5-10, 13,15, 17- 21,23,26, 28, 30-37 are rejected under 35 U.S.C. 102(b) as being anticipated by Bowyer et al (US 5920467).

**Claims 1,30:** a motor control system comprising a first set of contacts (Fig. 2:24) coupled in series with an input of a variable frequency drive (Fig. 2: 40); and a second set of contacts (Fig. 2: K4) coupled in series with an output of the variable frequency drive (Fig. 2: 40); an operator having a first position and a second position, wherein the first and second sets of contacts are closed when the operator is in the first position and the first and second sets of contacts are open when the operator is in the second position (col. 4:63-4, it is well known in the art that a relay has an operator that is open in one position, such as to the left, and closed in another, such as to the right); a bypass relay (fig 2:K9) having a coil (Fig. 2:74) and a third set of contacts (K5) coupled in parallel with the first and second sets of contacts (k4); the switch being configured to energize the relay coil (74) and close the third set of contacts (k5) when the first and second contacts are open (Col. 9:1-9)

**Claim 3:** the operator is adapted to be manually positioned in the first and second positions (col. 4:63-4, it is well known in the art that a relay has an operator that is open in one position, such as to the left, and closed in another, such as to the right; also, it has been held that the recitation that an element is “adapted to” perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138).

**Claim 5:** a fourth contact (fig 8:k15) coupled in series with the relay coil (74/k9) and adapted to open the third set of contacts when the first and second sets of contacts are closed

(it has been held that the recitation that an element is “adapted to” perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchison, 69 USPQ 138).

**Claim 6:** the bypass switch (24/k4) is adapted to open the fourth contact to deenergize the bypass relay and open the third set of contacts before the first and second sets of contacts are closed (col. 10:33-38; also it has been held that the recitation that an element is “adapted to” perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchison, 69 USPQ 138).

**Claim 7:** a disconnect (fig 8:k10) adapted to control power to the controller (it has been held that the recitation that an element is “adapted to” perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchison, 69 USPQ 138), wherein the first set of contacts (24) is coupled in series with the disconnect (k10)

**Claim 8:** a terminal (Fig. 2: terminal from k4) adapted to receive a conductor coupled to the motor (it has been held that the recitation that an element is “adapted to” perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchison, 69 USPQ 138), wherein the second set of contacts (Fig. 2:k4) are coupled to the terminal.

**Claim 9:** a variable frequency drive (Fig. 2: 40).

**Claim 10:** a variable frequency drive (40) comprising a power input (into 40); an output (out from 40) coupled to the motor (16); an electrical system adapted to isolate (it has been held that the recitation that an element is “adapted to” perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchison, 69 USPQ 138) and comprising a manual bypass switch (24/k4) and a

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bypass relay (k9) having at least one set of contacts (col. 4:63-4) connected in parallel with the drive (40) and connected in series between a power source (18) and a motor (16); the manual bypass switch (24/k4) has a first set of contacts (24) connected in series to the input of the drive and a second set of contacts (k9) connected in series to the output of the drive.

**Claim 13:** the bypass switch comprises a double break switch having an operator wherein the first and second sets of contacts are closed when the operator is in the first position and the first and second sets of contacts are open when the operator is in the second position (col. 4:63-4, it is well known in the art that a relay has an operator that is open in one position, such as to the left, and closed in another, such as to the right).

**Claim 15:** the bypass switch (24/k4) has an early break contact (k5) in series with the relay (k9).

**Claim 17:** the power source is an electrical bus (bus lines from power source in Fig 2).

**Claim 18:** the electrical system (10) is operable to provide a control signal to the drive (40).

**Claim 19:** the electrical system (10) is coupled to an external communication system to enable the frequency output to be established remotely (fig. 1: 14).

**Claim 20:** a controller (Fig. 2:40) to drive a motor (Fig. 2:16); a bypass relay (Fig. 2: k9) in parallel with the controller (40); a bypass switch (fig. 2:24/k4) to couple a power source (Fig. 2:20) to the controller (Fig. 2:40) and the motor (Fig. 2: 16); the bypass switch isolates the controller (40) from the power source (20) and from the motor (16) and to close the bypass relay (k9) to couple the motor to the source.

**Claim 21:** the motor drive comprises a variable frequency drive (Fig. 2: 40).

**Claim 23:** the switch is a double break switch (col. 4:63-4).

**Claim 26:** a third set of contacts (k5) in series with the bypass relay (k9) for opening the bypass relay before the motor drive is recoupled between the power source and the motor.

**Claim 28:** orienting a bypass switch (k4/24) in a first position to couple a power source to a variable frequency drive (Fig. 2: 40) and couple to drive to a motor (Fig. 2: 16); and positioning the switch (Fig. 2: 24/k4) in a second position to remove power from the drive (Fig. 2: 40) and de-couple the drive from the motor (16).

**Claim 30:** reorienting the switch (24/k4) in the first position, the relay (k9) is opened before the power source is coupled to the drive (40) and the motor (16)

**Claim 32:** the relay coil (74) is in series with the auxiliary contact (k5).

**Claim 33:** the bypass switch (24/k4) has first and second positions (col. 4:63-4, open and closed), the first position enabling the drive, the second position isolating the drive (col. 9:1-8; 10:33-38).

**Claim 34:** the first and second contacts (24/k4) open before the auxiliary contact (k5) closes the relay (k9).

**Claim 35:** a control relay (k5) coupled to the bypass relay coil (76).

**Claim 36:** the control relay (k5) is in series with the bypass relay (k9) and a coil (76) of the control relay (k5) is energized.

**Claim 37:** a motor drive (40); a bypass relay (k9) in parallel with the drive; a controller comprising a bypass switch (24/k9) to couple the drive (40) between a power source (20) and the motor (16), the bypass switch isolates the motor drive (40) from the power (20/18) and from the motor (16) and to close the bypass relay (k9) to couple the motor directly to the power source and a set of contacts (k5) in series with the bypass relay for opening the relay before the motor drive (40) is recoupled between the power source and the motor.

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9. Claims 28 and 37 are rejected under 35 U.S.C. 102(b) as being anticipated by Owen (US 5130628).

**Claim 28:** orienting a switch (Fig. 2: 46) in a first position to couple a power source (Fig. 5: 3 phase source) to a variable frequency drive (Fig. 2: 44) and couple to drive to a motor (Fig. 2: 42); and positioning the switch (Fig. 2: 46) in a second position to remove power from the drive (Fig. 2: 44) and de-couple the drive from the motor (Fig. 2:42; Fig. 2: switch to the left).

**Claim 37:** a motor drive (44); a bypass relay (46) in parallel with the drive; a controller (48) comprising a bypass switch (50) to couple the drive (40) between a power source and the motor (42), the bypass switch isolates the motor drive from the power and from the motor (col. 5:1-27) and to close the bypass relay to couple the motor directly to the power source and a set of contacts (contacts of 46) in series with the bypass relay (46) for opening the relay before the motor drive (44) is recoupled between the power source and the motor.

#### ***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 16 rejected under 35 U.S.C. 103(a) as being unpatentable over Bowyer et al  
Claim 16: Bowyer et al teach the claimed limitations except for the variable frequency drive being in a first compartment and the switch and relay being in a second compartment. It would have been obvious to one having ordinary skill in the art at the time the invention was

made to place the items in separate compartments since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

***Response to Arguments***

12. Applicant's arguments with respect to claims 1,3,5-10, 13,15-21,23,26, 28, 30-37 have been considered but are moot in view of the new ground(s) of rejection.

In response to applicant's argument that a coil is disclosed and also shown in the drawings, as reference items (70) and (78), referring to page 8 lines 20-23, item (70) is referred to as a bypass contactor and not a coil; item (78) is referred to as a control relay and not a coil. In the drawings, item (70) is labeled "BP" whereas item (78) is labeled "TR", which does not necessitate a coil. Therefore, there is no mention of a coil in the original specification, which constitutes new matter.

***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Renata McCloud whose telephone number is (571) 272-2069. The examiner can normally be reached on Mon.- Fri. from 8 am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin can be reached on (571) 272-2800 ext. 4. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Renata McCloud  
Examiner  
Art Unit 2837

RDM



MARLON T. FLETCHER  
PRIMARY EXAMINER